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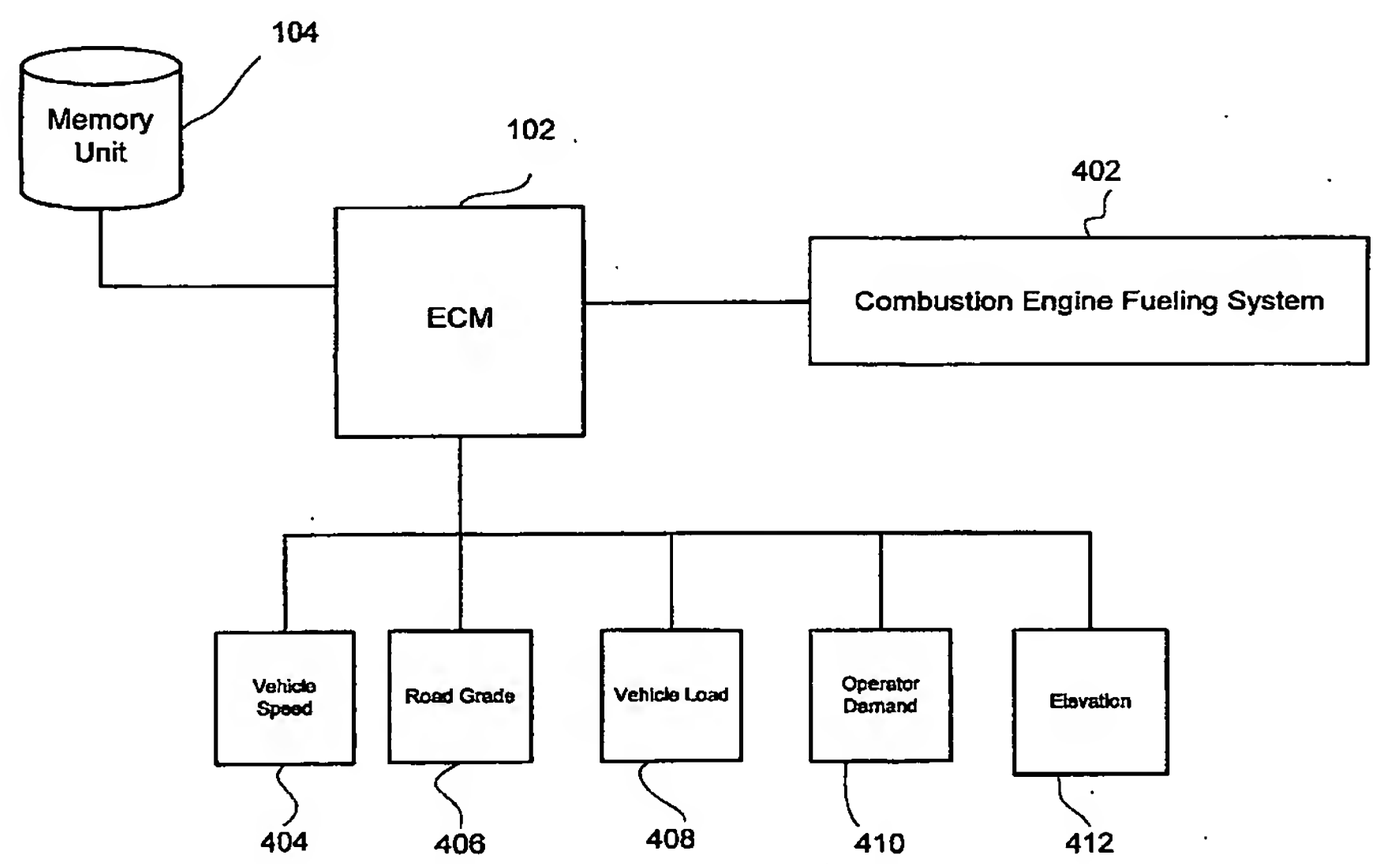
(54) Title: CONTROL SYSTEM AND METHOD FOR IMPROVING FUEL ECONOMY



(57) Abstract: A control system is provided for controlling the fueling system (402) of a combustion engine. The control system includes a sensing arrangement for measuring a plurality of engine and vehicle conditions (404, 406, 408, 410, 412) in real time. The control system also includes a fuel map that defines engine fueling parameters corresponding to engine operating conditions. The control system also includes a control module (102) for controlling the fueling parameters of the fueling system by selecting fueling parameters from the fuel map based on current engine operating conditions and adjusting the selected fueling parameters based on the plurality of engine and vehicle conditions measured by the sensing arrangement.

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